REMARKS

Claims 1 to 3, 5 to 11, 13 to 19 and 21 to 25 were pending in the Application at the time of examination. The Examiner rejected Claims 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, and 25 under 35 U.S.C. 103(a) as obvious over the Dukach et al. reference in view of the Huras et al. reference.

Claims 1 to 3, 5 to 11, 13 to 19 and 21 to 25 remain in the Application.

REJECTION OF CLAIMS 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, AND 25 UNDER 35 U.S.C. 103(A)

The Examiner rejected Claims 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, and 25 under 35 U.S.C. 103(a) as obvious over the Dukach et al. reference in view of the Huras et al. reference.

Applicants' independent Claim 1 reads as follows, with emphasis added:

> A method for moving data between processes in a computer-based system, each process calling for one or more symbols in a first library, the method comprising:
>
> associating each process with a second library, **said second library comprising one or more symbols with a door interprocess communication mechanism wherein,**
>
> **said second library enables each process to communicate a synchronization signal through a door, said door enabled by said door interprocess communication mechanism;**

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intercepting a call from each process for a symbol in said first library; and

redirecting said call to a corresponding symbol in said second library.

Applicants' independent Claim 9 reads as follows, with emphasis added:

A program storage device readable by a machine, tangibly embodying a program of instructions readable by the machine to perform a method for moving data between processes in a computer-based system, each process calling for one or more symbols in a first library, the method comprising:

associating each process with a second library, **said second library comprising one or more symbols with a *door* interprocess communication mechanism wherein,**

said second library enables each process to communicate a synchronization signal through a door, said door enabled by said door interprocess communication mechanism;

intercepting a call from each process for a symbol in said first library; and

redirecting said call to a corresponding symbol in said second library.

Applicants' independent Claim 17 reads as follows, with emphasis added:

An apparatus for moving data between process in a computer-based system, the apparatus comprising:

a plurality of processes;

a first library of symbols having one or more symbols, said plurality of processes calling for said one or more symbols in said first library of symbols;

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> **a second library of symbols having one or more symbols, said one or more symbols associated with *a door* interprocess communication mechanism wherein,**
> **said second library enables each process to communicate a synchronization signal through a door, said door enabled by said door interprocess communication mechanism**; and
> an interposer intercepting a call for one or more symbols in said first library of symbols and redirecting a corresponding call for one or more symbols in said second library of symbols.

Applicants' independent Claim 25 reads as follows, with emphasis added:

> An apparatus for moving data between processes in a computer-based system, each process calling for one or more symbols in a first library, the apparatus comprising:
> means for associating each process with a second library, **said second library comprising one or more symbols with *a door* interprocess communication mechanism wherein,**
> **said second library enables each process to communicate a synchronization signal through a door, said door enabled by said door interprocess communication mechanism;**
> means for intercepting a call from each process for a symbol in said first library; and
> means for redirecting said call to a corresponding symbol in said second library.

As shown above, each of Applicants independent Claims 1, 9, 17 and 25 includes the recited feature of a "second library comprising one or more symbols with **a door** interprocess communication mechanism wherein, said second library enables each process to communicate a synchronization signal **through a**

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door, said door enabled by said door interprocess communication mechanism " or words to that effect.

The Examiner has stated, with emphasis added:

> ...Dukack (sic) teaches the invention substantially as claimed including: data (information, col 3, ln 35-42), data between processes in a computer-based system (col 6, ln 35-40/col 8, ln 37-42), one or more symbols (OS function 144, col 8, ln 55-62), the first library (the library of the OS 134, col 8 ln 52-55), process calling for one or more symbols in a first library (col 8, ln 58-62), associating each process with a second library (col 8, ln 36-37), a second library (the interposed library, col 8, ln 36-37/ln 60-65), one or more symbols of the second library(the interposed library function col 8, ln 52-65), interprocess communication mechanism(interprocess communication links, col 8, ln 40-46), **a door interprocess communication** (filer descriptor, col 3, ln 62-64/col 10, ln33-34/ln 53-55), redirecting said call to a corresponding symbol in said second library(col 8, ln 63-65).

Applicants first note that Dukach's column 8, lines 35 to 65 reads as follows, with emphasis added:

> The back end server and the interposed library which is linked to it, are one process. The front end server is another. The OS accords each separate process its own separate subspace within the common OS space. **A given process cannot directly write to another process's sub-space, but the OS does let it communicate with another processes in the same OS space through interprocess communication links, or pipes. Such pipes are defined and only work within a given OS space defined by a given OS kernel.**
>
> Although it is not mentioned elsewhere in this specification, those skilled in the computer arts will understand that the OS normally runs processes in virtual memory, i.e., a memory space larger than

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> that which will fit in RAM at one time, and automatically swaps portions of this virtual memory space in and out of memory from and to the hard disk, as needed for current computations.
>
> As stated above, the back end server is linked to the interposed dynamically-loaded library 116. The back end server is also linked to the library of the OS 134. As is shown in FIG. 10, the interposed library includes functions 144A, such as bind( ), listen( ), and accept( ), having some of the same names as the functions 144 contained in the OS's network library 142. Since the interposed library is linked to the back end server with a higher precedence than the OS's library, if the back end server calls a named OS function 144 for which there is a similarly named interposed library function 144A, the call will be intercepted by the interposed library function. This means the back end server process's program control will go to the interposed library function 144A, rather than to the similarly named OS function 144.

As shown above, Dukach specifically discloses, teaches and suggests that the interprocess communication links are pipes. Indeed Dukach discloses, teaches and suggests that "interprocess communication links" and "pipes" are identical terms by reciting "**interprocess communication links, or pipes...**" Consequently, Applicants respectfully submit that Dukach specifically discloses, teaches and suggests that pipes are the only form of interprocess communication link suitable for use with Dukach's structure and that Dukach specifically rules out, and teaches away from, the use of any other form of interprocess communication link.

Pipes, such as those specifically disclosed and taught in Dukach, are discussed in the "BACKGROUND OF THE INVENTION SECTION" of Applicants Specification at, for example page 2, line 18 to page 3, line 7. Pipes, such as those specifically disclosed and taught in Dukach, are also shown in Applicants FIG.1, clearly marked a "Prior Art". Page 2, line 18 to page

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3, line 7 of Applicants Specification reads as follows, with emphasis added:

> Interprocess communication (IPC) is the exchange of data between two or more processes. **Various forms of IPC exists: pipes, sockets, shared memory, message queues, and Solaris ™ doors.**
>
> **A pipe provides the ability for a byte of data to flow in one direction and is used between processes. These two processes must be of common ancestry.** Typically, a pipe is used to communicate between two processes such that the output of one process becomes the input of another process. FIG. 1 illustrates a conventional pipe 100 according to a prior art. The output of process 102 becomes the input of process 104. Pipe 100 is terminated when process 102 that is referencing it terminates. Data is moved from process 102 to process 104 through a pipe 100 situated within a kernel 106.

As shown above, Applicants clearly distinguish pipes as distinct from doors and then explain some of the limitations of pipes. The Examiner then goes on to state:

> Dukack (sic) does not explicitly teach door (sic). However, APA teaches door (doors, page 5, ln 3-7).
>
> It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Dukack (sic) to APA because APA's doors would provide the fastest form of interprocess communication for exchange of data between two or more processes.

Page 5 lines 3 to 11 of Applicants' Specification reads as follows:

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> **The fastest form of IPC on Solaris™ Operating System from Sun Microsystems Inc. is *doors*. However, applications that want to communicate using *doors* need to be explicitly programmed to do so.** Even though *doors* IPC is very fast, the socket-based IPC is more popular since it is portable, flexible, and can be used to communicate across a network.
>
> A definite need exists for a fast IPC technology that would overcome the drawbacks of *doors* and socket-based IPC. **Specifically, a need exists for a fast socket technology implementation using *doors*.** A primary purpose of the present invention is to solve these needs and provide further, related advantages.

Here again, Applicants have shown a clear distinction between doors, and other forms of IPCs, such as the specifically disclosed pipes of Dukach.

In the latest action, made final, the Examiner has cites the reference entitled "Solaris Infrequently asked and obscure questions", a new reference, in an attempt to show, using hindsight in light of Applicant's disclosure, that one definition of doors includes other forms of IPCs, such as the specifically disclosed pipes of Dukach. However, the text above from Applicants' Specification clearly sets forth the distinction between doors, as defined by Applicant, and other forms of IPCs, such as the specifically disclosed pipes of Dukach, as does the Dukach text itself. Consequently, Applicants respectfully submit that the Examiner is using hindsight in light of Applicants disclosure to try to manipulate the definition of doors to include other forms of IPCs, such as the specifically disclosed pipes of Dukach.

Applicants further submit that the addition of the Huras et. al. reference does nothing to cure the deficiencies of the Dukach reference. Consequently, Applicants respectfully submit

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that neither the Dukach reference, the Huras et reference, or any proper combination of the Dukach reference and the Huras et reference, discloses, teaches, suggests, or provides motivation for **a door** interprocess communication mechanism wherein, said second library enables each process to communicate a synchronization signal **through a door, said door** enabled by said door interprocess communication mechanism " or words to that effect, as recited in Applicants claims.

In light of the discussion above, Applicants respectfully traverse the continued obviousness rejection of Claims 1, 9, 17 and 25. To make a prima facie obviousness rejection, the MPEP directs, with emphasis added:

> **BASIC CONSIDERATIONS WHICH APPLY TO OBVIOUSNESS REJECTIONS**
> When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:
> (A) The **claimed invention must be considered as a whole;**
> (B) **The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;**
> (C) **The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention;** and
> (D) **Reasonable expectation of success is the standard with which obviousness is determined.**

MPEP § 2141, 8th Ed., Rev. 4, p. 2100-120 (May 2004). It is noted that this directive stated "the following tenets . . . **must be adhered to**." Accordingly, failure to adhere to any one of these tenets means that a prima facie obviousness rejection has not been made.

The final rejection failed to adhere to multiple of these tenets. As discussed above, the Examiner is failing to consider Applicants' invention as a whole including the recited a "second library comprising one or more symbols with **a door** interprocess communication mechanism wherein, said second library enables each process to communicate a synchronization

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signal **through a door, said door enabled by said door interprocess communication mechanism** " or words to that effect.

The Examiner has also failed to consider the references as a whole and show where the references have suggested the desirability, and thus the obviousness, of making the proposed combination.

In addition, the Examiner is using hindsight in light of Applicants disclosure to try to manipulate the definition of doors to include other forms of IPCs, such as the specifically disclosed pipes of Dukach.

Finally, the Examiner is essentially using the new reference entitled "Solaris Infrequently asked and obscure questions", a new reference, to make his rejection. However, the Examiner has made the action final, thereby denying Applicants their right to a non-final rejection when new references are cited against them. Consequently, at a minimum, Applicants respectfully request the Examiner withdraw the final status of this rejection.

In light of the discussion above, Applicants' respectfully request the Examiner withdraw the rejection of Applicants' independent Claims 1, 9, 17 and 25 and allow Claims 1, 9, 17 and 25, as amended, to issue.

Claims 2, 3, 5, 6, 7 and 8 depend, directly or indirectly on Claim 1, as amended. Therefore, Claims 2, 3, 5, 6, 7, 8 include all of the features and limitations of Claim 1, as amended. Consequently, in light of the discussion above with respect to Claim 1, Applicants respectfully request allowance of Claims 2, 3, 5, 6, 7, and 8.

Claims 10, 11, 13, 14, 15 and 16, depend, directly or indirectly on Claim 9, as amended. Therefore, Claims 10, 11, 13, 14, 15, 16, include all of the features and limitations of Claim 9, as amended. Consequently, in light of the discussion above with respect to Claim 9, Applicants respectfully request allowance of Claims 10, 11, 13, 14, 15, and 16.

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Claims 18, 19, 21, 22, 23 and 24 depend, directly or indirectly on Claim 17, as amended. Therefore, Claims 18, 19, 21, 22, 23 and 24 include all of the features and limitations of Claim 17, as amended. Consequently, in light of the discussion above with respect to Claim 17, Applicants respectfully request allowance of Claims 18, 19, 21, 22, 23 and 24.

CONCLUSION

For the foregoing reasons, Applicants respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicants.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 6, 2006.

Attorney for Applicants — April 6, 2006 Date of Signature

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